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ZAMBIA

Regional Transport Development PP

[690-0231]

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ACTION MEMORANDUM FOR THE ACTING DIRECTOR, USAID/ZIMBABWE

FROM: Eugene Morris, Acting Regional Development Officer

DATE: August 27, 1985

PROBLEM: Your approval is requested for the authorization of a grant for \$10,540,000 from the Economic Support Fund for the Southern Africa Regional Transport Development Project (690-0231). Individual grants will be made to the Governments of Mozambique (\$5,540,000) and Zambia (\$5,000,000) for improvements of important rail systems serving the region. The project components are entitled Mozambique Railways Improvement and Zambia Railways Improvement. The entire \$10,540,000 will be obligated in Fiscal Year 1985.

DISCUSSION: The goal of this regional project is to increase the GNP of SADCC member countries by reducing the marketing costs of exports and imports. Specifically, the grants will enable key rail systems to improve their operational capacities and the efficiency of their performance. The two lines identified for assistance under this project are the Beira-Machipanda line in Mozambique and the entire north-south route of the Zambia Railways system. Both of these lines are vital to the transport of commodities which underpin the economies of the countries of Southern Africa.

A brief description of each project, along with a summary financing plan, follows:

1. Mozambique Railways Improvement

The \$5,540,000 grant to Mozambique will be for the rehabilitation of the Beira-Machipanda rail system. AID funding will be used for track and locomotive repair and rehabilitation, workshop conversion, workshop equipment, foundry equipment, on-the-job training, and short-term technical assistance. By the end of the three-year project, we expect that system utilization will be dramatically increased through the activities of the project. The Host Country contribution (both financial and in-kind) will be the equivalent of \$940,000.

2. Zambia Railways Improvement

AID's contribution to this project component is part of a large, multi-donor effort under the auspices of the IBRD's Fourth Railway Project for Zambia. AID funds in the sum of \$5,000,000 will be used exclusively for the purchase of locomotive spare parts for the rehabilitation of the existing fleet of General Electric locomotives. Other IBRD Fourth Railway Project activities include: track repair, improvement of the signaling and communications systems, wagon purchase and rehabilitation, training and technical assistance. It is

anticipated that the GOZ and donors will contribute the following amounts to the total project:

U.S. \$ Millions

IDA	20.0
ADB	20.0
AID	
This Project	5.0
ZAMCAM	5.0
SIDA	5.2
Belgium	4.0
KFW	1.6
GOZ	<u>22.3</u>
TOTAL	<u>88.1</u>

The GOZ funding is divided between \$16.3 million equivalent in local currency (including in-kind contributions) and \$6.0 million in foreign exchange for spare parts.

Through the efforts of the total IBRD project, Zambia Railways will increase the utilization rates for locomotives and wagons, thereby improving the operational efficiency of the system.

Several special conditions and covenants are recommended for the individual Grant Agreements.

Mozambique Component

1. A condition precedent to disbursement of funds for the improvement of the workshop and foundry at Beira will require that the host country provide evidence that emergency power generation to operate the shops is available at all times.
2. The covenants to be included in this component's agreement are the standard clauses concerning the fulfillment of the host country's financial and personnel obligations for the project, the submission of project progress reports, and a requirement that all commodities financed by AID be for the exclusive use of the project.

Zambia Component

1. Conditions precedent to disbursement for this component require the satisfaction of all conditions set forth by the IBRD under the Fourth Railway Project and the submission to AID of a procurement plan for the locomotive spare parts. No special covenants are anticipated.

Project reviews have been conducted in the Southern Africa Regional Office, USAID/Harare and REDSO/ESA. Both reviews found the project to be technically and economically sound and adequately planned and budgeted for in accordance with Congressional and Agency requirements. The review committees

have recommended approval of the proposed project and you have received the required concurrence from the Director, REDSO/ESA via telegram Nairobi 23973, dated July 22, 1985.

The Initial Environmental Examinations for both project components were approved per State 240017, dated August 6, 1985. No human rights issues are involved in regard to this project.

Each component of the project includes an Implementation Plan which has been carefully reviewed by AID and which was developed with the full cooperation of the host country entities involved. Based on the information and analyses contained in the Project Paper, the financial, engineering and other planning requirements of FAA Section 611 (a) are considered satisfied. The project also complies with all other statutory requirements (see statutory checklists).

The field officer responsible for the project is F.D. Light (Southern Africa Regional/USAID/Zimbabwe) and the AFR/PD backstop officer is Wendy Stichel.

A congressional notification was submitted as required on July 25, 1985. The 15-day waiting period expired on August 9, 1985 and there were no issues raised by Congress.

RECOMMENDATION: In accordance with the authority delegated to USAID/Zimbabwe in State 240017, it is recommended that you sign the attached Project Authorization in the amount of \$10,540,000.

CLEARANCES:

REDSO/Legal:KHansen (in draft)
REDSO/RCMO:LDunn (in draft)
REDSO/Anal:CBarnes (in draft)
REDSO/PROJ:JGraham (in draft)
RFMC:RHenrich (in draft)

CONCURRENCE

J.W. Koehring
Director, REDSO/ESA
(See Nairobi 23973)

P R O J E C T A U T H O R I Z A T I O N

Name of Country/Entity: Southern Africa Regional
Name of Project: Southern Africa Regional Transport
Development
Number of Project: 690-0231

1. Pursuant to Section 531 of the Foreign Assistance Act of 1961, as amended, I hereby authorize the Regional Transport Development Project for the Southern African region involving planned obligations of not to exceed ten million five hundred forty thousand dollars (\$10,540,000) in grant funding over a one-year period from the date of authorization, subject to the availability of funds, in accordance with the A.I.D./OYB allotment process, to help finance the foreign exchange and local currency costs of the project. The planned life of the project is through September 30, 1998.

2. The project consists of assistance to the Government of the People's Republic of Mozambique (GPRM) in the amount of five million five hundred forty thousand dollars (\$5,540,000) for the rehabilitation of the Beira-Machipanda Railway System and to the Government of Zambia in the amount of five million dollars (\$5,000,000) for the purchase of railroad locomotive spare parts under A.I.D. Regulation 1 procedures in support of the IBRD Fourth Railway Project. With respect to the Mozambican component, the project will finance emergency rail line repairs, short-term technical assistance, on-the-job training and commodities for the workshops and foundry.

3. The bilateral Project Agreement which may be negotiated by the A.I.D. Principal Officer to Mozambique shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

A) Source and Origin of Commodities; Nationality of Services

Commodities financed by A.I.D. under the project shall have their source and origin in the United States or the SADCC member countries, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities or services shall have as their place of nationality the United States or the SADCC member countries, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

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(B) Conditions Precedent to Initial Disbursement

Prior to the first disbursement of funds under the grant, or the issuance of documentation pursuant to which disbursements shall be made, the Cooperating Country shall submit to A.I.D., in form and substance acceptable to A.I.D., a statement containing the names and specimen signatures of the persons who will carry out the cooperating country's responsibility under the agreement, including the name and signature of the individual in the Caminhos de Ferro de Mocambique-Centro (CFM-C), who will be the Project Director, and the name and signature of the individual in the Direccao Nacional dos Portos e Caminhos de Ferro (DNPCF) in the Ministry of Ports, Railways and Merchant Marine (MPRMM) in Maputo who will oversee project activities.

The Cooperating Country will submit in writing, the name of the individual who will chair and convene the Project Implementation Committee meetings. A meeting of the committee must be held prior to the disbursement of project funds.

(C) Additional Disbursement

Prior to disbursement of funds under this Grant, or the issuance of documentation under which disbursement shall be made for workshop and foundry improvements at Beira, the Cooperating Country shall provide evidence satisfactory to A.I.D. that emergency power generation to the workshops is available and can be operated at all times, except as A.I.D. may otherwise agree in writing.

(D) Covenants

The Cooperating Country shall covenant, except as A.I.D. may otherwise agree in writing, to:

(1) Provide the required contribution for the local currency costs of the project in a timely manner in compliance with the decisions of the Project Implementation Committee and as outlined in the Project Agreement and to provide promptly, as needed, all funds in addition to the Grant needed for the effective carrying out of agreed-upon activities.

(2) Provide in a timely manner all personnel required of the Grantee for implementation of the Project, in compliance with the decisions of the Project Implementation Committee.

(3) Endeavour to have all emergency railway repairs completed by March 1987.

(4) Assure that all commodities procured for the project will be used exclusively for Project purposes and that stock records and requisitions for supplies shall be carefully kept and monitored.

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(5) Endeavor to have completed the first phase of the conversion of a section of the steam workshop in Beira to diesel prior to September 1986.

(6) Through the MPRMM, submit quarterly reports on Project progress to include an update in other projects of the CFM-C or others which may effect the Project. The reports shall also include information on employee training and transfer of equipment, personnel, locomotives and rolling stock which can effect the operation of the Beira-Machipanda Railroad and the Beira port.

4. The bilateral Project Agreement which may be negotiated by the A.I.D. Principal Officer to Zambia shall be subject to the following essential terms and covenants and major conditions, together with such other terms and conditions as A.I.D. may deem appropriate.

(A) Source and Origin or Commodities; Nationality of Services

Commodities financed by A.I.D. under the Project shall have their source and origin in the United States, except as A.I.D. may otherwise agree in writing. Except for ocean shipping, the suppliers of commodities and incidental services shall have as their place of nationality the United States, except as A.I.D. may otherwise agree in writing. Ocean shipping financed by A.I.D. under the Project shall, except as A.I.D. may otherwise agree in writing, be financed only on flag vessels of the United States.

(B) Conditions Precedent to Disbursement

Prior to the first disbursement of funds under the Grant or the issuance of documentation pursuant to which disbursement shall be made, the Cooperating Country shall, except as A.I.D. may otherwise agree in writing, furnish to A.I.D. in form and substance acceptable to A.I.D.:

(1) Evidence that it has satisfied the conditions of effectiveness agreed to with IBRD for the Fourth Railway Project; and,

(2) A written procurement plan for the commodities to be financed by A.I.D. under the Grant. The general elements of the plan shall be set forth in the Project Grant Agreement. Details with respect to the plan shall be set forth in a Project Implementation Letter.

(C) Covenants

The Cooperating Country shall covenant, except as A.I.D. may otherwise agree in writing, that:

(1) All commodities financed by A.I.D. under the Grant shall be used exclusively by Zambia Railways for the rehabilitation of GE Locomotives as planned under the IBRD Fourth Railway Project; and,

(2) It will submit monthly status reports covering the receipt and use of A.I.D.-financed spare parts.

August 27, 1985
Date


John J. Lewis
Acting Mission Director
USAID/Zimbabwe

Cleared by:
DIR/REDSO/ESA: JKoehring: (in draft)
RCMO/REDSO/ESA: (in draft)
RLA/SA:GBisson: (in draft)
RDO:DBPfeiffer: (in draft)
CONT:USAID/Zimbabwe:MALewis Q

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AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT DATA SHEET

1. TRANSACTION CODE
 C A = Add
 C = Change
 D = Delete
 Amendment Number: 1
 DOCUMENT CODE: 3

2. COUNTRY/ENTITY
Southern Africa Regional

3. PROJECT NUMBER
690-0231

4. BUREAU/OFFICE
AFR 06

5. PROJECT TITLE (maximum 40 characters)
Regional Transport Development

6. PROJECT ASSISTANCE COMPLETION DATE (FACD)
 MM DD YY
09 30 88

7. ESTIMATED DATE OF OBLIGATION
 (Under "B" below, enter 1, 2, 3, or 4)
 A. Initial FY 85 B. Quarter 4 C. Final FY 85

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY 85			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total	6,770	3,770	10,540	6,770	3,770	10,540
(Grant)	(6,770)	(3,770)	(10,540)	(6,770)	(3,770)	(10,540)
(Loan)	()	()	()	()	()	()
Other U.S.						
1. ZAMCAM	5,000		5,000	5,000		5,000
2.						
Host Country	6,000	17,240	23,240	6,000	17,240	23,240
Other Donor(s)	50,800		50,800	50,800		50,800
TOTALS	68,570	21,010	89,580	68,570	21,010	79,580

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) ESF	901-S	824				5,000		10,540	
(2)									
(3)									
(4)									
TOTALS									

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

To improve the capacity and efficiency of key railway systems in the Southern Africa Region.

14. SCHEDULED EVALUATIONS

Interim MM YY 11 86 Final MM YY 09 88

15. SOURCE/ORIGIN OF GOODS AND SERVICES
 000 941 Local Other (Specify) SADCC

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a 26 page PP Amendment.)

Clearance: CONT: Marjorie A. Lewis md 9/27/85

17. APPROVED BY

Signature: John J. Lewis

Title: John J. Lewis
Acting Director, USAID/ZIMBABWE

Date Signed MM DD YY
08 27 85

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION
 MM DD YY

REGIONAL TRANSPORT DEVELOPMENT (ZAMBIA)
PROJECT PAPER SUPPLEMENT

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The IBRD Fourth Railway Project-Staff Appraisal Report is available in the USAID Southern Africa Regional Library, Harare, Zimbabwe.

Project Paper Development Team

Gene Morris, PDO-AFR/PD
Charles Richter, Economist-PPC
Denis Light, Engineer-REDSO/ESA
Art Laemmerzahl, RCMO-REDSO/ESA

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I. Summary and Recommendations

A. Summary

The purpose of the proposed project is to increase the efficiency of the operations of Zambia Railways (ZR). It is a multi-donor effort being implemented under the auspices of the IBRD's Fourth Railway Project for Zambia. Under previous IBRD-supported railway projects, technical assistance, training, track improvements and workshop improvements have been made. Studies conducted during the Third Railway Project have led to most of the project recommendations for implementation during the Fourth Railway Project.

Five donors are joining the IBRD in an effort to further strengthen ZR's operations: AID, the African Development Bank, Belgium, SIDA, and KFW. The largest component of the total program will be the rehabilitation of existing locomotives, including the procurement of spare parts. AID's contribution will finance the purchase of \$5.0 million in U.S. source spare parts for General Electric locomotives. These spares will be used exclusively for the rehabilitation program.

Other project components which will be funded by other donors and the Government of Zambia include: (1) track improvement; (2) improvements in the signaling and communications systems; (3) further equipping of workshops; (4) training of ZR personnel; and (5) technical assistance.

The total cost of the project is U.S. \$83.1 million of which the U.S.\$ equivalent of 16.3 million is in local costs which will be financed or provided in kind by the GOZ. The GOZ will contribute an additional \$6.0 million in foreign exchange costs for a total of \$22.3 million (27% of the total project funding).

The project will be implemented by Zambia Railways with technical assistance funded by the IBRD. The Grantee will be the Government of Zambia.

Through the analyses conducted during the design of this project, the Project Paper Development Team has concluded that:

-the project approach is technically and economically sound, administratively feasible, and that environmental concerns have been adequately addressed;

-the technical design and cost estimates are reasonable and adequately planned pursuant to Section 611 (a) of the Foreign Assistance Act;

-the procurement of goods for the project is adequately planned for and scheduled; and

-all statutory criteria have been satisfied.

The GOZ and donors will contribute to the project in the following amounts:

	<u>Local Costs</u>	<u>Foreign Costs</u>	<u>Total</u>
	(U.S. \$ Millions)		
IDA	-	20.0	20.0
ADB	-	20.0	20.0
SIDA	-	5.2	5.2
AID			
This Project	-	5.0	5.0
ZAMCAM	-	5.0	5.0
Belgium	-	4.0	4.0
KFW	-	1.6	1.6
GOZ	16.3	6.0	22.3
Totals	<u>16.3</u>	<u>66.8</u>	<u>88.1</u>

The total AID contribution to the Fourth Railway Project will be \$10.0 million, all for GE locomotive spare parts. As noted in the above budget summary, \$5.0 million will be funded under this project--Regional Railways Improvement--and \$5.0 million will be funded under a separate activity--the Zambia Multi-Channel Agricultural Marketing (ZAMCAM) Program. Both sources of funds, in concert with the contributions of other donors, are directed toward increasing the productive capacity in Zambia and the rest of the region through improvements to the inter-connected rail system that serves the import and export needs of all SADCC countries.

B. Recommendation

The PP team recommends that the Director, USAID/Harare, with the concurrence of the Director, REDSO/ESA, approve the project and authorize a grant of \$5,000,000 (life-of-project funding) from the Economic Support Fund.

II. Background

A. The Regional Transportation Network and Trade Flows

As highlighted in the Regional Railways Improvement PID, the transportation system in Southern Africa is a vital ingredient in promoting economic activity in the region. Recognizing this importance, the Southern Africa Development Coordination Conference (SADCC) has placed a high priority on the development and maintenance of a comprehensive, efficient transportation system. In fact, one of the first permanent bodies created by SADCC - the Southern Africa Transportation and Communications Commission (SATCC) - was specifically assigned the task of overseeing the development of this sector. Since its inception, SATCC has carried out extensive planning and project

identification efforts; over a hundred projects have been identified and funding commitments totalling U.S.\$719 million have been made by various donors and SADCC member states.

Several of the projects proposed by SATCC are directed toward the improvement of the operational efficiency of Southern Africa's vast rail network. The region is served by Africa's largest and longest inter-connected railway system handling national, intra-regional and external traffic. The system is complemented by a rapidly expanding network of paved roads suitable for medium- and long-distance trucking.

Trade moving through this system can be divided into three main categories:

- trade between countries in the region;
- trade with the Republic of South Africa;
- international movements via the region's ports.

Figure 2 depicts the distribution of this traffic along the primary transportation corridors in 1981, while Figure 3 gives the same movements as estimated for 1985. The most noticeable changes between 1981 and 1985 are shifts due to the disruption in traffic through Mozambique and a decline in commodity flows from Zambia southward through Zimbabwe.

When external trade is disaggregated from the total picture, traffic patterns reveal a strong bias for using RSA ports. International flows through RSA ports account for 58% of the region's total, while Mozambique and Tanzanian ports handle 23% and 17%, respectively.

The principal externally traded commodities shipped in 1981 were as follows (000 tons):

-petroleum fuels	1,415
-copper	1,178
-sugar and molasses	821
-fertilizers	606
-iron and steel products	537
-coal and coke	503
-maize	438
-asbestos	216
-chemicals	202
-wheat and flour	197

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-wood pulp	172
-salt	160
-tobacco	130
-timber	101

These fourteen commodity groups account for 73% of the region's total external trade flows. The figures are net of domestic traffic which can be very heavy in cases. For example, in 1981 Zimbabwe moved over 2 million tons of coal and 500,000 tons of maize internally by rail.

From the foregoing, it is clear that the regional transportation network has tremendous physical capacity and is critical to the economies of the SADCC countries.

B. Transportation Systems in Zambia

1. Introduction

Zambia is the major freight exporter of the landlocked nations in the Southern Africa region and has the most potential corridors to the ocean. The main transportation routes are via rail and road to Dar es Salaam; rail to the ports in Mozambique and RSA via Zimbabwe and Botswana; and road to Harare. Of the various transportation modes, rail is the most important and is favored by shippers for long-haul and bulk freight. In 1981, the Zambia rail system handled over 2.6 million tons of international freight, 1.5 million tons of which were going to and from Zambia itself. The remaining 1.1 million tons were commodities bound to/from Zaire which transited Zambia. These figures compare with a total of 575,000 tons shipped by road (36 tons of which were Zairian goods). Copper dominated Zambia's export freight traffic according to the latest figures: 181,000 tons were shipped by rail to the RSA port of East London; 273,000 tons by rail to Dar es Salaam; and 68,000 tons by road to Dar es Salaam. In addition, some 619,000 tons of copper from Zaire bound for various destinations were shipped by rail through Zambia.

The above figures serve to highlight the importance of external trade to the Zambian economy, particularly the export of copper. Since exports and imports account for about 35% of GDP, the dependency of the country's economy on the transportation network and its access to sea ports is critical.

B'

2. Zambia Railways

a. Organization and Management

As previously noted, rail is the preferred mode of moving commodities in Zambia, both externally and internally bound. The country has two railways operated by two different entities. The vast majority of the rail system is managed and operated by Zambia Railways (ZR), a wholly-owned subsidiary of the Zambia Industrial and Mining Corporation. Operations are divided regionally, with each of the three regional managers reporting directly to the managing director of ZR. Organization is primarily along functional lines consisting of the following staff and line divisions and departments:

- Operations (headed by an assistant managing director)
 - mechanical engineering
 - civil engineering
 - signaling and communications
 - transportation
 - safety
- Administration (headed by an assistant managing director)
 - corporate planning
 - data processing
 - supplies
 - personnel (including the training division)
 - legal counsel
- Finance
- Marketing
- Public Relations
- Railway Police
- Audit

The total staff of Zambia Railways is about 8,000, including 22 expatriate advisors, managers and technical experts. The number of foreign employees has been reduced by 50 over the past three years as a result of IBRD training programs. Training and management improvements are a high priority of ZR and a recently completed manpower study has led to the creation of a special manpower development function with the Department of Personnel.

ZR also operates a training center which is responsible for both in-country and overseas training programs. At present, training is offered for artisans, technicians, operational staff, and supervisors in-country. The center employs 50 instructors.

According to an IBRD assessment, ZR staff are generally well qualified. What areas of weakness that do exist are being specifically addressed by the Bank's ongoing training and technical assistance efforts.

b. The Rail System

Zambia Railways operates a total of 1,273 kilometers of single track, the majority of which is the main line from the Zimbabwe border in the south to the copperbelt at Kitwe in the north. At Kapiri Mushi in the north central part of the country, the ZR system connects with the Tanzania-Zambia Railway leading to the port of Dar es Salaam.

Except for a few kilometers of track in the north where there are steel sleepers, the main line has wooden sleepers whose condition varies from poor to fair. Also, on some portions of the main line there are sharp curves combined with steep gradients which cause rails to deteriorate after about one year of service. Derailments are frequent on these sections and speed restrictions have been imposed. Previous project activities by the IBRD have strengthened certain sections of track but much more emphasis is needed on general track improvement to avoid derailments and eliminate speed restrictions.

c. Maintenance and Repair Facilities

Track maintenance for ZR is supervised by four track superintendents, assisted by track inspectors. Under current World Bank training programs, all expatriate maintenance personnel will be replaced by Zambians within the next three years.

The workshop used for the overhaul and major repair of locomotives, coaches and wagons is located in Kabwe in the central region of the rail line. In addition, there are four depots for routine maintenance located at various points in the rail system. The main workshop at Kabwe is well equipped and staffed and has adequate capacity to maintain existing equipment. New workshop equipment has recently been provided by the IBRD and technical assistance and training programs have improved the management and operations of the shop.

d. Freight Traffic

ZR total traffic has fluctuated between 4.5 and 5.1 million tons since 1977 with, however, an increase in ton-kilometers from an estimated 1.26 billion in 1977 to 1.56 billion in 1981/82 and 1.40 billion in 1982/83. The increase in average haul resulted from the reopening of the southern route through Zimbabwe in 1979 and from the increased importance of international transit traffic in total (from 30 percent in 1977 to 35 percent in 1983).

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The distribution of traffic in future is unlikely to change significantly from that of the last two years, unless there are unpredictable political developments which again close borders. Also, the only classes of freight traffic likely to grow, independent of a rapid recovery in economic activity, are agricultural inputs and outputs (an expansion on which the GOZ is placing considerable emphasis in its development plan) and coal. The Maamba colliery production is likely to expand significantly as a result of new equipment and to be absorbed by the rehabilitated Kafue fertilizer plant and, later, by substitution of coal for oil in mining. With virtually static traffic in other classes, aggregate traffic is forecast to increase in tonnage by 8 to 13 percent in 1983-89 and a further 5 percent by 1994. Recent volumes and forecasts are summarized below and detailed in Annex I.

Traffic in Thousands of Tons; Millions of Ton-Kilometers

		<u>Actual</u>		<u>Projected</u>	
		<u>1981/82</u>	<u>1982/83</u>	<u>1988/89</u>	<u>1993/94</u>
Domestic	tons	3295	2957	3417	3565
	tkm	674	634	741	846
Export	tons	543	546	540	600
	tkm	188	202	200	232
Import	tons	656	513	570	630
	tkm	217	164	183	202
Transit	tons	591	499	600	600
	tkm	477	403	485	485
TOTAL	tons	5085	4515	5127	5395
	tkm	1556	1403	1609	1765

III. Project Description

A. Overview and Project Activities

This project is part of a multi-donor effort in support of the IBRD's Fourth Railway Project for Zambia. Under previous Bank railway projects, workshops and other facilities have been renovated; ZR staff have been trained in managerial and technical fields; ten new locomotives were provided; technical assistance was provided to key ZR divisions; and 678 km of track have been renovated. The Fourth Railway Project builds on the experience of the previous projects and, in fact, is an outgrowth of the analytical studies conducted under the Third Railway Project.

The total effort will consist of nine major components.

- (1) Track Improvement - Rails are heavily worn on curves in the main line and about all the sleepers have exceeded their expected useful life. The branch line from Kitwe to the copperbelt area is in particularly bad condition and will require extensive repair in order to provide safe operations. Under the project, 30 km of rail and 80,000 sleepers will be replaced.
- (2) Spare Parts - Spare parts are required to increase ZR's locomotive availability from the present 62% to 75%. In addition, spares will be provided for the maintenance of wagons and other transport equipment.
- (3) Locomotive Rehabilitation - Some of ZR's locomotives have been neglected for so long that major overhauling will be necessary. A major repair program will be undertaken at the Kabwe workshop, which benefited from IBRD-provided technical assistance, training and equipment under the Third Railway Project. About sixty percent of the total locomotive spare parts called for under this project will be used in the initial, major overhaul effort.
- (4) Signaling and Telecommunications - The outmoded signaling system used by Zambia Railways has already been replaced by the IBRD. This project will include the replacement of the outmoded open-wire pole system supporting the signaling and communications network. The current system, which is unreliable and subject to vandalism, will be replaced by radio communications.
- (5) Workshops and Equipment - Additional equipment will be provided for the main Kabwe shop.
- (6) Training - The project will rehabilitate the existing training workshop, including the provision of tools, equipment and technical assistance. In addition to the on-the-job and in-country training activities, the project will fund approximately 100 person-months of overseas training.
- (7) Operations Facilities - Under this component, a modern wagon control system will be introduced which will be tied into the data processing facilities financed by the Third Railway Project.
- (8) Technical Assistance - About 574 person-months of technical assistance in both advisory and operational capacities will be provided.
- (9) Studies - Another 108 person-months of technical services are included to conduct further studies on the long-term improvements needed to sustain ZR operations at efficient levels.

AID Contribution

As its contribution to the IBRD project, AID will finance US\$ 5.0 million in U.S. source spare parts for General Electric locomotives. This initial tranche of spares is needed for the major overhaul program. Additional spares will be provided by AID through the Zambia Multi-Channel Agricultural Marketing Program, the IBRD, and the African Development Bank. While AID's funding will be solely for GE locomotive parts, some of the spares to be financed by other donors will be for wagons. Section VI.B. covers the procurement and contracting procedures that will be followed for the AID-funded component of the project. A listing of the other donor contributions by funding level and project activity is included in Section IV.A., Budget and Financing Plan.

B. Expected Accomplishments

This project will contribute to the regional sector goal of increasing the GNP of SADCC member states. A more immediate subgoal identified for the project is to reduce the marketing costs of exports and imports in the SADCC countries. The specific purpose of this effort is to improve the capacity and efficiency of Zambia Railways. By the end of the three-year project, the following conditions are expected to exist:

- (1) locomotive availability will be increased from 62% in 1984 to 75% in 1987;
- (2) Wagon availability will reach 90%, up from the current 82%;
- (3) Average locomotive utilization will increase from 92,000 km per available locomotive per year to 105,000 km; and
- (4) average wagon productivity will increase from 220,000 to 300,000 net ton/km per available wagon per year.

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IV. Project Analyses

A. Budget and Financing Plan

1. Estimated Cost (U.S.\$ Million)

	Local	Foreign	Total
	(US \$ Million)		
Track	0.7	5.2	5.9
Signaling & Telecommunication	1.8	9.2	11.0
Rolling Stock	1.9	7.6	9.5
Workshops and Equipment	0.4	1.2	1.6
Spare Parts	3.4	21.1	24.5
Operations Facilities	0.6	2.2	2.8
Training	0.7	2.7	3.4
Technical Assistance	1.4	5.2	6.6
Sub Total	<u>10.9</u>	<u>54.4</u>	<u>65.3</u>
Price Contingencies	5.4	12.4	17.8
	----	----	-----
TOTAL	16.3	66.8	83.1

2. Financing Plan by Donor and GOZ
(US \$ Million)

AFDB	-	20.0	20.0
SIDA	-	20.0	20.0
USAID	-	5.2	5.2
Belgium	-	5.0	5.0
KFW	-	4.0	4.0
ZR/GOZ	-	1.6	1.6
	<u>16.3</u>	<u>11.0</u>	<u>27.3</u>
	<u>16.3</u>	<u>66.8</u>	<u>83.1</u>
	=====	=====	=====

3. Financing Plan - Foreign Cost (By Donor and Project Component)
US \$ (000)

	<u>IDA</u>	<u>AFDB</u>	<u>SIDA</u>	<u>USAID</u>	<u>BEL- GIUM</u>	<u>KFW</u>	<u>GOZ</u>	<u>TOTAL</u>
Track		5200						5200
Signaling/Telecom		9140						9140
Rolling Stock			4500		2300	850		7650
Workshop/Equipment	730					470		1200
Spare Parts	4687	3000		4245			9168	21100
Operations Fac.	2200							2200
Training	2700							2700
Technical Assistance	4200				1000			5200
Contingencies	5483	2660	652	755	700	280	1831	12361
	-----	-----	-----	-----	-----	-----	-----	-----
Total	20000	20000	5152	5000	4000	1600	10999	66751
	=====	=====	=====	=====	=====	=====	=====	=====

Financial Performance of Zambia Railways

ZR's financial performance in the past has been erratic. After operating with annual net losses during the early 1970's, profits were recorded from 1976 through 1980. Starting in 1981, however, losses have been recorded ranging from Kwacha 6.0 million to Kwacha 19.1 million. The major cause has been the lack of timely tariff increases by the Government to offset inflation.

Summary Income Statement (K millions)

	1976	1977	1978	1980	1981	1982	1983	1984
Revenues	40.0	41.7	47.0	84.5	67.4	72.3	80.9	93.0
Working Expenses	31.3	32.6	35.3	66.9	63.9	69.5	77.8	92.7
Operating Surplus	<u>8.7</u>	<u>9.1</u>	<u>11.7</u>	<u>17.6</u>	<u>3.5</u>	<u>2.8</u>	<u>3.1</u>	<u>0.3</u>
Depreciation	3.3	3.6	3.7	5.5	4.7	6.3	6.8	7.9
Net Operating Revenues	<u>5.4</u>	<u>5.5</u>	<u>8.0</u>	<u>12.1</u>	(1.2)	(3.5)	(3.7)	(7.6)
Interest and Other	2.0	2.3	4.3	1.3	4.8	6.2	6.8	11.5
Net Income	<u>3.4</u>	<u>3.2</u>	<u>3.7</u>	<u>10.8</u>	(6.0)	(9.7)	(10.5)	(19.1)
	====	====	====	====	=====	=====	=====	=====

With the increase in efficiency that should result from this project, combined with anticipated tariff increases, it is anticipated that ZR will show a positive net income during 1987. A covenant requiring an annual review of tariff rates and adjustments, if necessary has been included in the IBRD project agreement with the GOZ.

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B. Economic Rate of Return Analysis

The economic costs of the Zambia Railways Improvement Project are derived from financial costs, excluding taxes. A sensitivity analysis is conducted permitting costs to increase by 10%. Since no construction is planned under the project, this is a reasonable worst case assumption for cost increases. The streams derived from analysis of the cost of rail transport and the avoidable alternative of using road transport are distributed between local and foreign cost savings to the extent possible with existing data.

Two alternative measures of these benefit streams were utilized. The first is based upon the best traffic forecast and the second on a low growth traffic scenario up to 1990, and then assuming the pessimistic assumption that traffic and benefits would decline at an average of 2% per annum from 1990-1999. The latter case would correspond to the complete elimination of copper and copper-related inputs traffic by 1999, an unlikely occurrence. Both scenarios are presented in Table 1.

The estimated economic rate of return (ERR) is shown in Table 2 for the whole project, including the components not financed by AID. The range of the variations for the ERR of 17.4% to 24.3% indicates that the project is acceptable in economic terms.

After estimating the composite ERR for the project, the IBRD disaggregated the individual project components. The allocation of benefits to these components is a difficult task which requires rather broad assumptions. These ERRs are presented in Table 3. As can be seen, the components which this project will finance, spare parts for locomotives, have higher ERRs (29.0% to 43.5%) than the composite project.

All of the ERR calculations consider two classes of benefits--increased availability and increased utilization of both locomotives and wagons. The distribution of benefits between the locomotive and wagons components was 50:50, a rather arbitrary division. However, no better distribution is clearly evident. If the avoided investment cost had been employed, the attribution to wagons would have been higher, but if the percentage capacity increase of locomotives and wagons were employed separately, the locomotive attribution would have exceeded that of the wagons.

Although the allocation of benefits to components is arbitrary, the dividing line between improving availability and increasing utilization is narrow. Nevertheless, the superior ERR for rehabilitation as compared to new investments is clear.

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C. Social Analysis

Improving the efficiency of the regional rail system will have far reaching effects on the people of Southern Africa. As transportation costs are reduced, producers should benefit from increased internal trade and exports and consumers should have to pay less for imported items. An efficient, well run rail system should stimulate additional economic activity in the region which will benefit most sectors of the population.

While it can be argued that all SADCC member states will benefit from the project, Zambia and Zaire stand to benefit the most. As previously discussed, both countries depend heavily on the region's rail network, particularly ZR and TAZARA, for exports and imports. In both countries, imports and exports account for a large share of GDP, making a smoothly functioning transportation system an absolute necessity for growth in the economy.

D. Technical Analysis

1. Track

About 700 km of the main line has track laid on wooden sleepers varying in age from 15 to 25 years. Most of the sleepers are, therefore, rotten and have to be replaced. Some sections have sharp curves and the rail in these curves are worn out and also have to be replaced. Parts of the branch line in the north, which is important to the movement of ore for copper production, area in poor condition and have to be improved.

Due to the poor track condition, speed restrictions have been imposed for all freight trains from the original speed of 65 km/h to 45 km/h. In addition, several sections have speed restrictions of 15-20 km/h on lengths varying from 1 km up to 13 km. Before entering one section, the train has to stop.

Despite speed restrictions, derailments occurred on the weak sections, halting the operations for an average of approximately five hours. During one incident, the line was blocked for 73 hours.

About 30 km of rail and 89,000 sleepers will be replaced along with fishplates, nuts and washers.

Provision will also be made for acquisition of various track maintenance equipment and tools.

The strengthening of track will eliminate temporary speed restrictions and reduce derailments caused by the weakened track.

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TABLE 1

Two Scenarios of Traffic Growth for Zambia Railways
(Traffic in Thousands of Tons/Tkm in Millions)

	Actual 1982/83		Forecast			
	T	Tkm	1985/1989		1993/1994	
			Best T /Tkm	Worst T /Tkm	Best T /Tkm	Worst T /Tkm
Domestic Traffic	2957	634	3415/741	3275/707	3565/846	3415/741
Export via Tazara	369	65	364/ 64	364/ 64	410/ 72	463/ 64
Export via South Africa	155	132	156/132	156/132	190/160	156/132
Export Total	546	202	540/200	540/200	600/232	540/200
Import via Tazara	204	32	226/ 36	226/ 36	250/ 40	220/ 36
Import via South Africa	308	132	344/147	344/147	380/162	344/147
Import Total	513	164	570/183	570/183	630/202	570/183
Transit to Zaire	206	166	140/194	200/142	240/194	240/194
Transit from Zaire	293	237	360/291	300/242	360/291	360/291
Total Transit	499	403	600/485	500/404	600/485	600/485
Grand Total	4516	1403	5125/1610	4885/1495	5395/1765	5125/1610

TABLE 2
Economic Rate of Return for the Entire Project (%)

Costs	Benefits				
	1	2	3	4	
A (best cost estimate)		21.8	24.3	29.9	21.6
B (costs increased by 10%)				17.4	19.8

- Note:
1. Best traffic forecast using differential truck/rail conversion factor (cf).
 2. Best traffic forecast with uniform cf.
 3. As (1) with low traffic forecast.
 4. As (3) with uniform cf.

TABLE 3
ERR for Individual Components of the Project (%)

	Without	With
	Differentialcf.	Differential cf.
Locomotive Spares	32.0	29.0
Wagon Spares	43.5	39.0
New Wagons	20.4	17.3
Total Wagons/Spares	35.7	32.2
Radio Communications	18.5	16.5
Operational Facilities	21.5	19.2

Source:

World Bank, "Staff Appraisal Report, Republic of Zambia, Fourth Railway Project", March 5, 1985.

2. Signaling and Telecommunications

The open-wire pole route of ZR was last overhauled in the 1950's prior to the installation of the original Centralized Train Control (CTC). It now has to support carrier telephone and data circuits considerably beyond its design capacity. After 30 years in service, the route requires major rehabilitation to remain in use. Also, the socio-economic conditions have made vandalism and theft an increasing cause of the system down-time. There is no prospect that investment in rehabilitation of the open-wire route would make any significant improvement in the system's reliability. There is also a substantial demand for increased capacity which cannot be economically met by an open-wire system.

Under the Third Railway Project, ZR is investing in related works as follows:

- a) Renewal of CTC System throughout the line. This work is in hand under contract to Siemens AG of West Germany.
- b) Installation of train and mobile radio communications, including UHF links between Lusaka and Kitwe. This work is in hand under contract to Aydin Monitor Systems of USA.
- c) Expansion of the telephone exchange network with provision for extension trunk dialing. Contract let to Philips of Holland; and
- d) Installation of a telegraph network using a central message switch, already completed by Philips of Holland.

Various alternative possibilities for replacement of the open-wire system have been studied and the alternative of using radio has been recommended by consultants as the most suitable and cost-efficient system. The Bank agrees with this proposal

The total estimated cost for renewal over the total system is US\$9.0 million. The system can be replaced in three independent phases and, depending on funds which can be made available in the project, one, two and/or all three phases will be included within the overall project.

3. Locomotives and Rolling Stock

Locomotives

ZR has 80 locomotives, of which 68 are main-line locomotives and 12 are shunters. Four locomotives have been heavily damaged and will be scrapped. About 30 locomotives on average are constantly out of service, including the four which will be scrapped. This will give an average availability of the locomotives of 62 percent. However, the availability varies from 60 percent up to 75 percent which leaves the Railway with a temporary locomotive shortage. Also, the traffic pattern affects the locomotive requirements. To have a sufficient number of locomotives available for its traffic, ZR has to rent locomotives from South Africa. During the past year, ZR has, therefore, rented between 6 to 15 locomotives.

ZR would not have had to rent locomotives to that extent if utilization had been satisfactory. A study, financed under the Third Railway Project, shows that the utilization can be increased by about 25 percent with proposed procedures but has not been successful due to poor reliability as a result of poor quality control after service and due to shortages of spare parts. However, the proposed project will include financing of spare parts as well as technical assistance for improved quality control. This will improve the locomotive reliability and reduce the need for new locomotives.

4. Wagons

ZR operates about 6,300 wagons, of which 2,800 belong to the Unitary System. In addition, ZR operates about 1,500 wagons from neighboring countries. During the last five years, ZR has been able to scrap close to 1,000 wagons as a result of 1,100 new wagons provided under the Third Railway Project, and another 1,000 wagons are due for scrapping during the next five years.

The availability of the fleet is low, 82 percent, and will be increased to about 90 percent as a result of increased stock of spare parts, to be financed under the proposed project, and the financing of technical assistance in wagon maintenance. In addition to maintenance problems, ZR faces a situation where some of its wagons remain in Zaire for an inordinate amount of time. Essentially, the wagons are used by Zaire for storage in lieu of having to build its own permanent storage facilities at rail terminals.

The utilization of the fleet is also low, 220,000 net tonne-km per available wagons against an expected 300,000 as a result of the introduction of a computerized wagon control system, and improvements in operations to be identified by a proposed study included in the project.

The present fleet of 6,300 wagons is equivalent to 5,166 wagons with the present availability of 82 percent and inclusion of rented wagons from neighboring countries, giving an effective total of 6,666.

Under the Fourth Railway Project, 1,000 old wagons will be scrapped, 170 new wagons will be purchased, availability will increase to 90 percent and equivalent utilization will also increase to 300,000 net tonne-km per available wagon. The equivalent wagon fleet will, therefore, amount to 8,186 units included those on hire. This is a net increase of the number of effective wagons by 22 percent and sufficient for ZR traffic needs.

5. Other Items

Twenty-four brake-vans included in the project are for the replacement of 13 brake vans which have been scrapped recently and for the brake vans which are planned to be scrapped.

Electrical lighting systems in some coaches will be modified. The current systems do not function in Zambia due to complexity and need of spare parts. The new system will be of simple design, easy to repair, and require a minimum of spare parts.

6. Workshop Equipment

ZR will require some additional workshop machinery and tools for its maintenance services. The list of equipment includes a crank-shaft grinder, internal grinder, some minor machines and hand-tools amounting to approximately US\$1.2 million.

7. Spare Parts

The foreign exchange required for spare parts amounts to US\$ 21.1 million, excluding contingencies, and is made up as follows:

	<u>US \$ ('000)</u>
i. Replenishment of stores	5,200
ii. Locomotive maintenance	8,500
iii. Wagon & Coach	4,000
iv. Track maintenance	1,500
v. Workshop	300
vi. Signaling & Telecommunications	1,500
vii. Computer	100
Total	<u>21,100</u>

i. Replenishment of Stores: A recent inventory of spares in stock shows the following funds required for replenishment of stores. Spares for passenger coaches have been excluded as investment for passenger traffic is a low priority item. The present "Normal Stock Level" has been reduced by 25 percent as a result of a new Materials Management System under implementation:

	<u>Locomotives</u>	<u>Wagons</u>	<u>Total</u>	
Normal Stock Level		6.0	1.9	7.9
Current Inventory		2.4	0.3	2.7
Investment Required		3.6	1.6	5.2
		===	===	===

ii. Locomotive Maintenance Spare Parts: The ZR maintenance program, based on traffic projections, is shown below. This program is agreed to with the Bank. The costs show the foreign exchange requirements for spare parts.

Service	Location	# of Services Per Year	Cost Per Year	Notes
15,000	Dept	384	165	
45,000	Dept	123	177	
75,000	Dept	64	116	
150,000	Workshop	38	494	
450,000	Workshop	10	800	Overhaul
900,000	Workshop	10	800	Overhaul
Repair	Depot & Workshop	47	300	
			2,852	
			=====	

The total cost of spare parts for locomotive maintenance for the three-year period, therefore, amounts to US\$8.5 million.

iii. Other Spare Parts: The foreign exchange requirements for other equipment is based on previous consumption, to which the requirements for spare parts needed for the backlog in maintenance is added.

8. Operation Facilities

Under the Project, ZR will improve maintenance quality control and maintenance planning and scheduling. A computerized production planning control system will be introduced using the existing computer facilities.

Also, the wagon utilization will be improved with the introduction of a computerized wagon monitoring control system.

9. Technical Assistance

The technical assistance component, except for training, amounts to US\$6.65 million, of which US\$5.2 million is foreign cost. All costs are excluding contingencies.

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i) Project Implementation (358 person-months)

ZR requires assistance in the following areas for project implementation:

a) Project Coordinator	18	
b) Locomotive Overhaul	72	
c) Production Planning Control		108
d) Wagon Monitoring Control		<u>160</u>
Total	358	

a) The Project Coordinator is required on a part-time basis for project planning, coordination and follow-up. He will also advise the managing director on project modifications and, on a priority basis, prepare quarterly reports required by the bank which will include status of project cost and reviewed implementation schedule in addition to information on operational, financial and traffic performance.

b) The Overhaul of Locomotives. ZR will require two full-time technicians: one with experience in the mechanical work on diesel electric locomotives and one with experience on the electrical work. The two technicians will assist ZR in planning the overhaul, identifying and ordering of parts, components, materials, and tools required, scheduling of the supply of materials and tools required, scheduling of the supply of the above-mentioned equipment, and assisting with the physical work, including quality control and testing of locomotives after completion.

c) Production Planning Control and Wagon Monitoring Control. ZR will require systems analysts and programmers with experience from similar systems.

ii) Advisory and Operational Service (216 Person-months)

The Chief Civil Engineer will retain three of his operational expatriate staff (engineers) during the project period. One will stay for the full three-year period, one for two years and the other for one year. After completion of the project, this branch will have been fully Zambianized.

The Chief Mechanical Engineer will require three qualified expatriate technicians during the project period basically to advise ZR in equipment maintenance and to improve quality control. The three technicians should be experienced in diesel locomotive maintenance. This branch will require expatriate assistance also for the period after project completion.

The Chief Signal and Telecommunications Engineer is an expatriate. He will be required for the project period, during which time a local engineer will be trained to take over the services. This branch will be fully Zambianized when the project is completed.

iii) Studies (108 person-months)

The studies will include:

	<u>Person Months</u>
a) Component Rehabilitation	72
b) Operational Improvements	36
Total	<u>108</u>
	===

a) The Component Rehabilitation Study is required to reduce ZR future need of foreign exchange for procurement of spare parts. A big portion of spare parts replaced due to wear and tear and poor functioning can be recovered should ZR have suitable facilities and experienced staff in restoring these parts. The study will identify suitable parts to restore, on a priority basis, the facilities required and staff training needed. Future projects will include facilities and training for the implementation. In addition to the introduction of the Wagon Monitoring Control System, ZR will also have to improve its operations. A study will concentrate on yard services to improve the circulation and transit of wagons at border stations and at the Tazaria connection station--Kapiri Moshi.

E. Environmental Considerations

No significant environmental consequences are anticipated as a result of the project. An IEE, recommending a negative determination, is attached as Annex D.

V. Implementation Plan

A. Implementation Responsibilities

Overall project management by AID will be the responsibility of the Southern Africa Regional Office in Harare. The project manager will be the regional engineer assigned to that office. A commodity management officer assigned to Lusaka will be responsible for matters pertaining to commodity procurement. The RCMO in REDSO/ESA will assist with the procurement of project commodities if necessary. Legal services will be provided by the RLA in REDSO/ESA and disbursements will be through the Office of the Controller, USAID/Zimbabwe.

The RCMO from REDSO will make an initial site visit to the main locomotive workshop in Zambia to review operations there and make recommendations for improvements if required. During the implementation of the project the Project Manager in Harare (Regional Engineer) will make quarterly progress inspection visits to the Zambia workshop.

The IBRD and Zambia Railways will provide overall project direction and will be responsible for coordinating the various donor inputs. The Bank will finance the services of 12 expatriate advisors and technical experts to assist with project implementation and will designate one of these advisors as Project Coordinator.

B. Implementation Schedule

The following schedule lists the major actions associated with the AID-financed component of the project. An implementation schedule for the entire Fourth Railway Project is included as Annex H.

Project Authorized	July 1985
Grant Agreement Signed	August 1985
Conditions Precedent Met	November 1985
Procurement Initiated	November 1985
Procurement Contract Executed	February 1986
Spare Parts Shipped	May 1986
Spares Arrive in Kabwe	November 1986
Rehabilitation Program Begins	November 1986
First Project Evaluation	November 1986
Rehabilitation Completed	September 1988
Final Evaluation	September 1988
PACD	September 30, 1988

C. Procurement and Contracting Procedures

The program calls for the import of spare parts to rehabilitate Zambia Railways (ZR) locomotives. Inasmuch as all locomotives presently in use on Zambia railways were manufactured by General Electric, proprietary procurement is called for. The spares to be financed under this project will be used solely for locomotive rehabilitation. None of the spares will be kept for inventory or used for routine maintenance. Thus, all parts will be sent to Zambia Railways' main workshop at Kabwe.

1. Eligibility: Inasmuch as this is grant assistance and Zambia is not classified as a Relatively Less Developed Country, the authorized source and origin of the parts to be financed is AID Geographic Code 000 (U.S. only).

2. Procurement: Because of the similarity of this procurement to another procurement to be undertaken under the ZAMCAM program, procurement for both will be under the rules of AID Regulation One. Since Commodity Import Programs have been our chief form of assistance to Zambia, Zambian Government officials are familiar with

AID Regulation One. Furthermore, since the entire procurement will consist of one transaction, there is no need to introduce another technique. AID/Zambia and the Regional Commodity Management Officer (RCMO) from REDSO/ESA will assist the ZR in drafting the Request for Quotations (RFQ).

a. Negotiated Procurement: Inasmuch as proprietary procurement is called for, procurement will be conducted under the provisions of Section 201.23, "Negotiated Procurement Procedures". At least two potential suppliers of the required parts have been identified by AID/W--Office of Commodity Management in AID/Washington (M/SER/COM). M/SER/COM will assist in identifying any other potential sources and RFQ's will be sent directly to the suppliers. The RFQ will stipulate that quotations must cover at least 80 percent of the required line items in order to be considered.

b. Responsible Agency: The Zambian Railway is responsible for submitting a procurement plan, which will be one of the conditions precedent. The following elements will be included in the plan:

- a) Designation of an individual with overall responsibility for implementing this program and maintaining liaison with A.I.D.
- b) Identification of the specific locomotives to be rehabilitated and a work plan for each.
- c) Submitting a detailed list of spare parts to be financed in sufficient time before issuance of the RFQ to permit examination by the Regional AID Engineer and the RCMO.
- d) Assurance that all other inputs required for the rehabilitation of the locomotives (technical supervision, labor, manuals, tools, fuel, etc.) are on hand in sufficient quantity to permit timely completion of the rehabilitation work.

Monthly work progress reports will be submitted to AID/Zambia. Provisions will be made to permit inspection by AID or its designated agent of the rehabilitated locomotives.

A REDSO Officer (RCMO) will visit the workshop at Kabwe in order to review the methods used by ZR to receive, inspect, inventory, store, and issue spares. Following that visit, and depending on the RCMO's findings, additional provisions may be required in the procurement plan.

3. Financing: Financing will be by direct letter of commitment to the U.S. supplier. As part of the initial project implementation letter (PIL), a Commodity Procurement Instruction will be sent to the Government of Zambia defining the commodities to be financed and setting the terminal dates. Also included with this implementation letter will be a Financing Request to be signed and returned by the Government. This will allow funds to be earmarked. Following issuance of the RFQ and award to a U.S. supplier, a direct letter of commitment will be issued for the procurement of the spare parts.

4. Transportation: It is anticipated that the spare parts will be imported C.I.F. Kabwe via Dar es Salaam and the Tazara Railway. Freight may be financed by A.I.D. on eligible (U.S. flag) vessels. Freight terms should be F.O.B. Tazara Railway. Inasmuch as payment to the Tazara Railway is not a foreign exchange cost, AID will not finance this portion of the freight costs. However, all insurance coverage will be on a warehouse to warehouse (Kabwe) basis, and denoted in U.S. dollars. Financing of air freight costs for specific shipments may be permitted following approval from AID/Zambia. Approval of any necessary air shipments will be based on either: a) critical need; or b) economy.

D. Evaluation Plan

Two project evaluations are planned: the first will be conducted after all AID-financed commodities have arrived in Zambia. This is an implementation progress evaluation and will assess the performance of ZR in receiving, inventorying and storing project commodities. The second evaluation will be conducted at the end of the IBRD Fourth Railway Project in 1989. It will be conducted jointly with the Bank and will determine the extent to which locomotive and wagon availability have increased as a result of the project. The final evaluation will also compare 1988 traffic data with current figures in order to establish that the project's purpose of increased rail haulage rates has been achieved.

VI. Conditions and Covenants

A. Conditions Precedent

1. Prior to the first disbursement under the Project, the GOZ will satisfy all Conditions of Effectiveness agreed to with the IBRD for the Fourth Railway Project.

2. Prior to the first disbursement under the Project, the GOZ will furnish in writing a procurement plan for the commodities to be financed by AID. The elements of the plan are described in Section V.B. of the Project Paper. Specific instructions for the preparation and submission of the plan will be conveyed to the GOZ and ZR by a project implementation letter.

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B. Covenants

1. The GOZ will covenant to provide the required local currency contribution in the equivalent sum of U.S.\$16,300,000 to achieve the objectives of the project.

2. All commodities financed by AID will be used exclusively by Zambia Railways for the rehabilitation of locomotives as planned under the IBRD Fourth Railway Project.

3. Monthly work progress reports will be submitted by the GOZ which will cover the status of the receipt and use of AID-financed commodities. These reports will be submitted to USAID/Zambia and the Southern Africa Regional Office in Harare.

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(5) ACTION AID-3 INFO AMB/DCM R/F

ANNEX A

EI XVZCZCSB0325
OO RUEHSB
DE RUEHLS #3331 1971401
ZNR UUUUU ZZH
O 161401Z JUL 85
FM AMEMBASSY LUSAKA
TO RUEHSB/AMEMBASSY HARARE IMMEDIATE 3607
RUEHNR/AMEMBASSY NAIROBI IMMEDIATE 6907
BT
UNCLAS LUSAKA 03331

OFFICIAL FILE

LOC: DISK 176 002-
16 JUL 85 1408
CN: 20530
CHRG: AID
DIST: AID

DATE JUL 17 1985

AIDAC

HARARE FOR G. MORRIS
NAIROBI FOR REDSO/ESA J. GRAHAM

E.O. 12356:N/A
SUBJECT: ZAMBIA RAILWAY REHAB PROJECT

REF: PATTERSON/GRAHAM TELEPHONE CONVERSATION 7/16

	ACTION	INFO
U		
DD		
ADD		
CONF		
HRD		
ROO	✓	
SNO		
COM		
CM		
REF		
ASSIST		
LIST		
DUE DATE		7-23-85
ACTION TAKEN		
NAN		

1. MISSION HAS RECEIVED A PARTS LIST PLUS ADDITIONAL INFORMATION FROM INDUSTRIAL SPECIALIST SUPPLIES LIMITED, GE MANUFACTURERS REPRESENTATIVE, AS ZAMBIA RAILWAYS WAS NOT FORTHCOMING WITH REQUESTED PARTS LIST. COPIES BEING POUCHED. MR. BARKER OF ISS IS WILLING TO ASSIST THE ZAMBIA RAILWAYS IN COMPILING THE FINAL PARTS LIST TO MEET THE CONDITION PRECEDENT AS MENTIONED IN REF.

2. THE FOLLOWING IS THE TEXT OF A REQUEST FOR AID FROM THE GRZ.

QUOTE

MR. H. KENNETH HILL
CHARGE DE AFFAIRES
AMERICAN EMBASSY
LUSAKA

DEAR SIR,

ZAMBIA RAILWAYS REHABILITATION PROJECT

AS YOU KNOW THE GOVERNMENT OF ZAMBIA AND THE WORLD BANK HAVE BEEN DISCUSSING THE REHABILITATION OF THE ZAMBIA RAILWAYS. I UNDERSTAND THAT THE US GOVERNMENT IS WILLING TO CONTRIBUTE TO THE PROJECT BY PROVIDING US DOLLARS 5 MILLION FOR THE PURPOSE OF PURCHASING GEC SPARE PARTS FOR ZAMBIA RAILWAYS LOCOMOTIVES. I WANT TO TAKE THIS OPPORTUNITY TO FORMALLY LODGE A REQUEST FOR FINANCIAL ASSISTANCE IN THE SUM OF US DOLLARS 5 MILLION FOR THE PURPOSE OF BUYING SPARE PARTS FROM GEC.

YOUR SINCERELY,

L. J. MWANANSHIKU, MP

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MINISTER OF FINANCE AND NCDP

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W 90-0231

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ANNEX D

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ACTION A10-00

HARARE 03462 00 OF 03 271205Z 7600 072001 A105171
CLEARANCE: GC/AFR DATE:

ACTION OFFICE AFDR-06
INFO AFSA-03 AFSA-03 AFOP-06 FPA-02 GC-01 GCAF-01 GCFL-01
ENGR-01 AFDA-01 RELO-01 MAST-01 /027 A4 327

3. INITIAL ENVIRONMENTAL EXAMINATION
REGIONAL RAILWAYS IMPROVEMENT PROJECT - MOZAMBIQUE

INFO LOG-00 COPY-01 AF-00 CIAE-00 EB-00 DODE-00 /009 W
-----004455 271206Z /50 17

PROJECT DESCRIPTION

P 270025Z JUN 85
FM AMEMBASSY HARARE
TO SECSTATE WASHDC PRIORITY 0000
INFO AMEMBASSY NAIROBI

THE PROJECT CONSISTS OF MAKING EMERGENCY RAIL REPAIRS, REHABILITATION OF LOCOMOTIVES, PROVIDING EQUIPMENT AND MATERIALS TO RAILROAD WORKSHOPS AND FOUNDRY AND TRAINING OF PERSONNEL. RAILROAD REPAIRS ARE TO THE EXISTING 318 KILOMETER LINE BETWEEN THE PORT OF BEIRA AND MACHIPANDA (ON THE ZIMBABWE BORDER) IN MOZAMBIQUE.

UNCLAS HARARE 03462

THE EXISTING RAILROAD IS THE SHORTEST ROUTE BETWEEN BEIRA AND MOST OF ZIMBABWE. THE RAILROAD HAS WEAKENED RAILROAD SLEEPERS THAT CAUSE DERAILMENT AND SLOWING OF RAILWAY TRAINS. THERE ARE ALSO STEEP GRADES (UP TO 2) AND VERY SHARP CURVES. THE RIGHT OF WAY IS NARROW AND HAS EXTREMELY SHORT SIGHT DISTANCES IN SOME SECTIONS. THESE CONDITIONS CREATE HIGH TRANSPORTATION COSTS, DELAYS, EXCESSIVE WEAR AND TEAR ON THE RAIL EQUIPMENT AND CAUSE A HIGH ACCIDENT RATE ALONG THE RAILROAD.

AIOAC

WASHDC FOR AFR/PO/SAP, AFR/TR/SDP
NAIROBI FOR REDSO/ESA

E.O. 12356: N/A
SUBJECT: IEE FOR SOUTHERN AFRICA REGIONAL RAILWAYS
IMPROVEMENT (690-0200) *Transport Development (690-0231)*
REF: HARARE 2915

THE PHYSICAL WORK TO BE PERFORMED OUTSIDE OF BEIRA UNDER THIS PROJECT WILL CONSIST OF REMOVING THE WOODEN SLEEPERS AND REPLACING THEM WITH STEEL SLEEPERS TOGETHER WITH NECESSARY BALLAST. MINOR ALTERATIONS WILL BE MADE TO THE EXISTING STEAM WORKSHOP FOR DIESEL LOCOMOTIVE REPAIR AND MAINTENANCE. ALL OTHER WORKSHOP SUPPORT WILL BE IN THE FORM OF TRAINING AND THE PROVISION OF EQUIPMENT AND MATERIALS FOR THE BEIRA WORKSHOP. REHABILITATION OF LOCOMOTIVES WILL BE DONE IN EXISTING WORKSHOPS IN ZIMBABWE. THE END RESULT OF THE EMERGENCY LINE REPAIRS WILL BE A RAILROAD THAT WILL ALLOW FOR FASTER AND MORE ECONOMIC MOVEMENT OF GOODS BETWEEN MOZAMBIQUE AND ZIMBABWE.

1. PER REFTEL, SUBJECT PROJECT NOW INCLUDES A ZAMBIA COMPONENT WHICH WILL FINANCE 5.2 MILLION DOLS IN U.S. SOURCE/ORIGIN SPARE PARTS IN SUPPORT OF IBRD FOURTH RAILWAY PROJECT. A COMBINED INITIAL ENVIRONMENTAL EXAMINATION IS SUBMITTED HEREIN FOR APPROVAL OF AFRICA BUREAU ENVIRONMENTAL OFFICER. AS OUTLINED IN REFTEL, TWO SEPARATE PROJECT DOCUMENTS WILL BE PREPARED FOR FINAL APPROVAL.

DISCUSSION OF ENVIRONMENTAL IMPACTS

2. INITIAL ENVIRONMENTAL EXAMINATION
OR
CATEGORICAL EXCLUSION

THE WORK PROPOSED WILL NOT REQUIRE ADDITIONAL LAND USE SINCE THE EXISTING RIGHT-OF-WAY WILL BE USED. ANY EROSION WILL BE EXTREMELY LIMITED AND IN THE OPEN COUNTRY. THE PROPOSED WORK SHOULD IMPROVE THE DRAINAGE CHANNELS AND RESULT IN REDUCED EROSION. FILL MATERIAL WILL BE FROM GRAVEL AND BORROW PITS ALONG THE RAILROAD AND IT IS UNLIKELY THAT ADDITIONAL LAND WILL BE USED FOR SUCH PURPOSES. MINIMAL IMPACT ON WATER QUALITY IS EXPECTED BECAUSE NO CHANGE IN NATURAL WATERWAYS IS ANTICIPATED.

PROJECT COUNTRY: SOUTHERN AFRICA REGIONAL (MOZAMBIQUE AND ZAMBIA)

AIR POLLUTION, DUE TO DUST CAN BE EXPECTED IN THE REPAIR PERIOD, BUT WILL NOT BE EXCESSIVE. NOISE AND FUMES FROM THE REPAIR EFFORT WILL BE IN OPEN, SPARSELY POPULATED AREAS.

PROJECT TITLE AND NUMBER: REGIONAL RAILWAYS IMPROVEMENT (690-0200.1)

THE PROJECT WILL NOT CAUSE ANY INEFFICIENT UTILIZATION OR WASTE OF NATURAL RESOURCES IN THE AREA. THE RAILROAD PASSES THROUGH A SPARSELY POPULATED AREA OF MOZAMBIQUE. WILDLIFE IN THE AREA HAVE ADJUSTED TO THE EXISTING RAILROAD AND NO ADDITIONAL OBSTRUCTIONS TO THEIR MOVEMENT WILL OCCUR. WITH THE EXCEPTION OF TEMPORARY CHANGES, NO NEGATIVE IMPACT ON VEGETATION IS ANTICIPATED. POSITIVE CHANGES WILL RESULT FROM IMPROVED ACCESS OF THE POPULATION OF MOZAMBIQUE, ZIMBABWE AND OTHER SOUTHERN AFRICAN COUNTRIES TO IMPORT AND EXPORT MARKETS. IN ADDITION, THE PEOPLE OF ZIMBABWE WILL HAVE A DIRECT BENEFIT BY MORE RELIABLE ACCESS TO THE SEA. TRAINING AND SUPPLY OF MATERIALS AND EQUIPMENT TO RAILROAD WORKSHOPS WILL ASSIST IN UPGRADING ARTISAN SKILLS.

FUNDING: FY 1985 - 4,973,000 DOLS (MOZAMBIQUE)
FY 1985 - 5,000,000 DOLS (ZAMBIA)
IEE/CE PREPARED BY: REGIONAL DEVELOPMENT OFFICE
USAID/ZIMBABWE
REDSO/ESA

ENVIRONMENTAL ACTION RECOMMENDED:

POSITIVE DETERMINATION
NEGATIVE DETERMINATION
OR
CATEGORICAL EXCLUSION

SEE ATTACHED JUSTIFICATION.

ACTION REQUESTED BY: ROY A STACY
DIRECTOR, USAID/ZIMBABWE

CONCURRENCE:

BUREAU ENVIRONMENTAL OFFICER
Bessie L. Boyd, AFR/TR/SDP X
APPROVED:
DISAPPROVED: DATE: 7/31/85

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PAGE 02 OF 02 HARARE 03462 00 OF 03 271205Z 7600 072001 A105171
RECOMMENDATIONS FOR ENVIRONMENTAL ACTION

HARARE 03462 00 OF 03 271205Z 7600 072001
CONSEQUENCES ARE ANTICIPATED AND SOCIO-ECONOMIC IMPACTS
ARE SIGNIFICANTLY POSITIVE. THEREFORE, A NEGATIVE
DETERMINATION IS RECOMMENDED.

4. PLEASE ADVISE AS SOON AS IEE REVIEWED AND CONCURRENCE
RECEIVED. LANPHER

THE PROPOSED IMPROVEMENTS IN THE RAILROAD WILL HAVE POSITIVE SOCIO-ECONOMIC EFFECTS, NOT ONLY FOR THE POPULATION WITHIN THE RAILROAD'S ZONE OF INFLUENCE, BUT ALSO IN TERMS OF FLOW OF GOODS AND OTHER PRODUCT AVAILABILITY IN MOZAMBIQUE, ZIMBABWE AND OTHER SOUTHERN AFRICA COUNTRIES. OTHER ENVIRONMENTAL IMPACTS WILL BE MINIMALLY NEGATIVE AND TEMPORARY. THEREFORE, A NEGATIVE DETERMINATION IS RECOMMENDED.

ZAMBIA RAILWAYS IMPROVEMENT PROJECT

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF SUPPLYING SPARE PARTS FOR LOCOMOTIVES OWNED BY ZAMBIA RAILWAYS (ZR). IT IS PART OF A LARGER, MULTI-DONOR EFFORT TO IMPROVE THE OPERATIONAL EFFICIENCY OF THE RAILWAY BY (1) REHABILITATING AND MAINTAINING EXISTING LOCOMOTIVES AND ROLLING STOCK; (2) IMPROVING ZR'S SIGNALLING AND COMMUNICATION SYSTEM; (3) REPAIRING CERTAIN SECTIONS OF THE TRACK BY REPLACING WORN RAIL AND SLEEPERS; (4) TRAINING ZR PERSONNEL; (5) EQUIPPING MAINTENANCE AND REPAIR WORKSHOPS; AND (6) PROVIDING TECHNICAL ASSISTANCE TO HELP IMPROVE ZR'S OPERATIONS. THE TOTAL IMPROVEMENT PROGRAM WILL BE CARRIED OUT UNDER THE AUSPICES OF THE IBRD FOURTH RAILWAY PROJECT WHICH BUILDS UPON THREE PREVIOUS RAILWAY IMPROVEMENT ACTIVITIES.

THE MAJOR OBJECTIVES OF THE PROJECT ARE:

- INCREASED LOCOMOTIVE AND WAGON AVAILABILITY;
- INCREASED LOCOMOTIVE UTILIZATION; AND
- INCREASED WAGON PRODUCTIVITY.

DISCUSSION OF ENVIRONMENTAL IMPACTS

THE ENTIRE LENGTH OF THE ZR SYSTEM WHICH RUNS FROM THE ZIMBABWE BORDER IN THE SOUTH TO THE COPPERBELT-AREA IN THE NORTH WILL BENEFIT FROM THE PROJECT. THE RAIL SYSTEM IS CURRENTLY IN USE BUT EFFICIENCY LEVELS ARE LOW DUE TO LOCOMOTIVE AND WAGON DOWNTIME PLUS POOR TRACK CONDITIONS IN SOME AREAS. INCREASING THE AVAILABILITY OF LOCOMOTIVES AND ROLLING STOCK WILL HAVE A MINIMAL IMPACT ON THE ENVIRONMENT. A LIMITED AMOUNT OF TRACK WILL BE REPAIRED, ALL ON EXISTING LINES. THERE WILL BE NO DISTURBANCES TO EXISTING LAND USE PATTERNS. WHILE THERE MAY BE SOME MINOR INCREASE IN AIR POLLUTION DURING THE TRACK REPAIR PHASE, IT WILL BE TEMPORARY AND LIMITED TO THE ALREADY HEAVILY TRAVELLED SECTIONS OF THE SYSTEM.

THE PROJECT WILL NOT CAUSE ANY INEFFICIENT USE OR WASTE OF NATURAL RESOURCES AND, SINCE THE IMPROVEMENTS WILL BE ON EXISTING RAIL LINES, NO ADDITIONAL DISTURBANCES TO WILDLIFE IN THE AREA WILL OCCUR.

THE PROJECT WILL HAVE POSITIVE SOCIO-ECONOMIC IMPACTS. SINCE EXPORTS AND IMPORTS CONSTITUTE A HIGH PROPORTION OF GDP, ZAMBIA'S ECONOMY IS DEPENDENT ON THE TRANSPORTATION NETWORK AND ACCESS TO SEAPORTS IN NEIGHBORING COUNTRIES. TO MAINTAIN CURRENT LEVELS OF ECONOMIC ACTIVITY, THE RAIL NETWORK MUST BE KEPT IN GOOD CONDITION SINCE IT HANDLES ALMOST ALL OF THE BULK TRAFFIC. IN ADDITION TO ITS IMPORTANCE IN MAINTAINING CURRENT PRODUCTION LEVELS, AN EFFICIENT RAIL SYSTEM IS VITAL TO ZAMBIA'S ASPIRATIONS TO ACHIEVE A MORE DIVERSIFIED PRODUCTIVE BASE.

RECOMMENDATION FOR ENVIRONMENTAL ACTION

NO SIGNIFICANT OR LONG-TERM NEGATIVE ENVIRONMENTAL

UNCLASSIFIED

PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only:
B.1. applies to all projects funded with Development Assistance loans, and
B.3. applies to projects funded from ESF.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

N/A for Regional Project

N/A

A. GENERAL CRITERIA FOR PROJECT

1. FY 1985 Continuing Resolution Sec. 525; FAA Sec. 634A; Sec. 653(b).

(a) Describe how authorizing and appropriations committees of Senate and House have been or will be notified concerning the project; (b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that amount)?

(a) A CN was prepared for this Project and the Congressional waiting period expired on 9 August 1985.

(b) Yes.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

(a) Yes.

(b) Yes.

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?
N/A

 4. FAA Sec. 611(b); FY 1985 Continuing Resolution Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973, or the Water Resources Planning Act (42 U.S.C. 1962, et seq.)?. (See AID Handbook 3 for new guidelines.)
Not a water-related Project.

 5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?
This is not a capital assistance (e.g. construction) activity.

 6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.
Yes. It will be so executed as such.
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7. FAA Sec. 601(a). Information and conclusions whether projects will encourage efforts of the country to:
(a) increase the flow of international trade; (b) foster private initiative and competition; and (c) encourage development and use of cooperatives, and credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.
8. FAA Sec. 601(b). Information and conclusions on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).
9. FAA Sec. 612(b), 636(h); FY 1985 Continuing Resolution Sec. 507. Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized in lieu of dollars.
10. FAA Sec. 612(d). Does the U.S. own excess foreign currency of the country and, if so, what arrangements have been made for its release?

(a) Project will increase the flow of international trade, particularly among SADCC members, (b) it should promote private initiative and competition, particularly within the SADCC region, (c) is not applicable, (d) it will lessen the monopolistic practices of the SAR by making ZRR, CFM-C, and NRZ more competitive, (e) it will improve the technical efficiency of ZRR and CFM-C, (f) is not applicable to Project.

U.S. suppliers will provide diesel locomotive parts and other commodities in support of the Mozambique subproject and all of the project commodities in support of the Zambian subproject.

The Mozambique subproject involves both FX and LC, and the GPRM is providing the equivalent of \$940,000 in LC costs. The Zambian subproject involves FX costs only, but it is in support of the IBRD fourth RR Project for which Zambia will make a large LC contribution.

Zambia and Mozambique are not excess currency countries.

11. FAA Sec. 601(e). Will the project utilize competitive selection procedures for the awarding of contracts, except where applicable procurement rules allow otherwise? Yes.
12. FY 1985 Continuing Resolution Sec. 522. If assistance is for the production of any commodity for export, is the commodity likely to be in surplus on world markets at the time the resulting productive capacity becomes operative, and is such assistance likely to cause substantial injury to U.S. producers of the same, similar or competing commodity? Not applicable.
13. FAA 118(c) and (d). Does the project comply with the environmental procedures set forth in AID Regulation 16. Does the project or program taken into consideration the problem of the destruction of tropical forests? Yes.
Not applicable.
14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)? Not applicable.

15. FY 1985 Continuing Resolution Sec. 536. Is disbursement of the assistance conditioned solely on the basis of the policies of any multilateral institution?

No. The GPRM and GOZ's policies in addition to SADCC's apply.

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

Not a DA-funded Project.

- a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote

Not applicable.

Not applicable.

Not applicable.

- the participation of women in the national economies of developing countries and the improvement of women's status, (e) utilize and encourage regional cooperation by developing countries?
- Not applicable.
- Not applicable.
- b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?
- Not applicable.
- c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?
- Not applicable.
- d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed country)?
- Not applicable.
- e. FAA Sec. 110(b). Will grant capital assistance be disbursed for project for more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing, or is the recipient country

"relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than \$100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character."

Not applicable.

- f. FAA Sec. 122(b). Does the activity give reasonable promise of contributing to the development of economic resources, or to the increase of productive capacities and self-sustaining economic growth?

Not applicable.

- g. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civil education and training in skills required for effective participation in governmental processes essential to self-government.

Not applicable.

2. Development Assistance Project Criteria (Loans Only) Not a DA loan.
- a. FAA Sec. 122(b). Information an conclusion on capacity of the country to repay the loan, at a reasonable rate of interest. Not applicable.
- b. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete with U.S. enterprises, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan? Not applicable.
3. Economic Support Fund Project Criteria
- a. FAA Sec. 531(a). Will this assistance promote economic and political stability? To the extent possible, does it reflect the policy directions of FAA Section 102? It will promote economic and political stability with in the SADCC Region by lessening economic dependence on the RSA.
- b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities? No.
- c. FAA Sec. 534. Will ESF funds be used to finance the construction of, or the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives? No.
Not applicable.

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- d. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

Special account arrangements will be made for the Zambian subproject.

5C(3) - STANDARD ITEM CHECKLIST

Listed below are the statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by imposing limits on certain uses of funds.

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of commodities and services financed?
2. FAA Sec. 604(a). Will all procurement be from the U.S. except as otherwise determined by the President or under delegation from him??
3. FAA Sec. 604(d). If the cooperating country discriminates against marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company?

Yes: The Zambian subproject will be under Reg. 1 procedures and will be restricted to U.S. businesses only.

Yes.

Yes.

- 4B

4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

Not applicable.

5. FAA Sec. 604(c). Will construction or engineering services be procured from firms of countries which are direct aid recipients and which are otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one of these areas? Do these countries permit United States firms to compete for construction or engineering services financed from assistance programs of these countries?

No.

6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S. flag commercial vessels to the extent such vessels are available at fair and reasonable rates?

No.

7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other Federal agencies will be utilized, are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?
- Yes.
- Not applicable.

8. International Air Transportation Fair Competitive Practices Act, 1974. If air transportation of persons or property is financed on grant basis, will U.S. carriers be used to the extent such service is available?
- Yes.

9. FY 1985 Continuing Resolution Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?
- All direct AID contracts under the project will contain this provision.

3. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services be used?
- Not a construction project, but U.S. engineering services will be solicited for the Mozambique RR. Rehabilitation activity.
2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?
- Not a construction project.

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million (except for productive enterprises in Egypt that were described in the CP)?

Not applicable.

C. Other Restrictions

1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?

Not applicable.

2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?

Not applicable.

3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries?

Yes.

4. Will arrangements preclude use of financing:

- a. FAA Sec. 104(f); FY 1985 Continuing Resolution Sec. 527. (1) To pay for performance of abortions as a method of family planning or to motivate or coerce persons to practice

NOT applicable.

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abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

- b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? Yes.
- c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes.
- d. FAA Sec. 662. For CIA activities? Yes.
- e. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes.
- f. FY 1985 Continuing Resolution, Sec. 503. To pay pensions, annuities, retirement pay, or adjusted service compensation for military personnel? Yes.

- g. FY 1985 Continuing Resolution, Sec. 505.
To pay U.N. assessments, arrearages or dues? Yes.
- h. FY 1985 Continuing Resolution, Sec. 506.
To carry out provisions of FAA section 209(d) (Transfer of FAA funds to multilateral organizations for lending)? Yes.
- i. FY 1985 Continuing Resolution, Sec. 510.
To finance the export of nuclear equipment, fuel, or technology or to train foreign nationals in nuclear fields? Yes.
- j. FY 1985 Continuing Resolution, Sec. 511.
Will assistance be provided for the purpose of aiding the efforts of the government of such country to repress the legitimate rights of the population of such country contrary to the Universal Declaration of Human Rights? No.
- k. FY 1985 Continuing Resolution, Sec. 516.
To be used for publicity or propaganda purposes within U.S. not authorized by Congress? Yes.

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LOGICAL FRAMEWORK
REGIONAL RAILWAYS IMPROVEMENT 690-0209.1

ANNEX C

<u>Sector Goal</u>	<u>Measures of Goal Achievement</u>	<u>Means of Verification</u>	<u>Assumptions</u>
To increase real GNP in SADC member states.	increase in exports decrease in cost of imports	Statistical measurement of goods carried on the SADC system.	SADC and SATCC continue to function and member states cooperate for their mutual benefit.
<u>Project Purpose</u>	<u>End of Project Status</u>	<u>Means of Verification</u>	<u>Assumptions</u>
To improve the capacity and efficiency of selected rail systems in the region	Increased rail traffic By Dec. 31, 1988, there should be a locomotive productivity increase of 10% compared to 1985.	Records of tonnage shipped (on ZR)	Demand for rail services for freight shipment increases

Zambia Railways Improvement Project

<u>Project Inputs</u>	<u>Funding Target</u>	<u>Verifiable Indicators</u>	<u>Assumptions</u>
Spare parts for locomotives and wagons.	\$5 million in spare parts over the three year life of project.	AID disbursement records. Statistical records on maintenance made by ZR.	AID supplies assistance in a timely manner. Spare parts can be procured quickly.
<u>Project Outputs</u>	<u>Magnitude</u>	<u>Verification</u>	<u>Assumptions</u>
Increased availability of locomotives and wagons.	By Dec. 31, 1988, the effective numbers of locomotives and wagons should be, respectively, 54 and 5,987.	Statistical records of rolling stock in use by ZR.	The entire project, as specified by the World Bank, is carried out.
Productivity increases in utilization of locomotives and wagons.	By Dec. 31, 1988, there should be a productivity increase of 10% with respect to 1985 for the locomotives and wagons in use.	Tonnage carried per effective number of locomotives and tonnage carried per effective number of wagons.	Demand for ZR services increases (e.g. retrenchment by Zambia does not adversely affect the commodities being shipped by rail).

APPENDIX A